

ABSTRACT

In a lithographic apparatus, a beam of radiation passes along a beam path to a substrate, for applying patterned illumination to the substrate. An exchangeable aperture screen is inserted in the beam path to partially block out the beam from a remainder of the path onto the substrate. A test surface is provided on the aperture screen, so that the test surface receives a part of the beam that is not passed along the remainder of the beam path. The test surface is made of a material that is sensitive, under influence of radiation from the beam, to chemical alterations that also affect the optical element under influence of radiation from the beam. The test surface is later analyzed for chemical alterations after exposure to the beam.